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Blending of Hazardous Waste
With Fuel Products

Statement for the Record by
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Mr. Chairman and Members of the Subcommittee:

We are pleased to submit for your hearing today this statement for the record. At your request, we investigated allegations that fuel products illegally blended with hazardous wastes have been exported over the road between Canada and the United States, where their use may pose a threat to the environment and to public health and safety. Specifically, you asked that we determine, in so far as possible, whether the alleged activities are in fact occurring and, if so, the extent of the problem. You also requested that we track one detected shipment of an alleged illegally blended fuel product by Lilyblad Petroleum Inc.

In summary, our investigation and interviews of environmental enforcement officials revealed only isolated incidents in which illegally blended fuel products were transported, or were suspected of being transported, over roads between the United States and Canada. Further, the consensus of officials we interviewed was that no one has reliable information on the extent to which the alleged activities may be occurring. However, these officials all expressed concern about the possible adverse environmental and health consequences associated with the illegal blending of hazardous wastes into fuel products that are subsequently used in the United States. Officials of the U.S. Customs Service (Customs), responsible for monitoring the flow of commerce across the U.S. border, acknowledged that the opportunity exists for the transshipment of illegally blended fuels. According to Customs officials that we interviewed, Customs agents inspect fuel shipments and other cargo when they have specific reason to question compliance with U.S. laws and regulations. Typically, however, Customs officials rely on information contained in shipper-prepared certificates and manifests accompanying the shipments, in accordance with federal regulations. Later in our statement, we discuss an instance in which a hazardous waste fuel may have been misrepresented on its manifest by a shipper, Lilyblad Petroleum Inc.

BACKGROUND AND METHODOLOGY

The importation of petroleum is governed by the Toxic Substances Control Act (TSCA), which is implemented through regulations promulgated by the Environmental Protection Agency (EPA) and Customs. These regulations require petroleum importers to certify that their shipments comply with TSCA by submitting a certification to that effect at the border. EPA and Customs rely on these certifications to indicate the chemical composition of the shipments, in enforcing TSCA requirements. However, EPA regulations state that both agencies "will monitor chemical imports to determine if shipments and their import comply with the certification requirements and the substantive mandates of TSCA."

Shipments of used fuel oil and other fuel products may contain chemicals that require them to be classified as "hazardous wastes" under the Resource Conservation and Recovery Act (RCRA). The importation of this kind of mixture is governed under the same RCRA tracking and reporting system applied to all generators or transporters of hazardous wastes in the United States. Like TSCA, this tracking system relies primarily on importers to determine and accurately disclose the chemical composition of their cross-border shipments.

The problem of illegal blending may arise in two general situations. First, hazardous wastes may be mixed into petroleum products, which are then certified and imported as new fuels in violation of TSCA. Second, used fuel oils and other waste fuels containing hazardous contaminants may be misrepresented and imported in violation of TSCA and RCRA. A complex set of federal and state regulations permits the burning of these waste fuels in controlled settings for energy recovery, but these rules are sometimes circumvented inadvertently or intentionally.

A series of articles in various newspapers in 1989 alleged that hazardous wastes were being illegally blended into fuel products and transported over the road between locations in Canada and the United States. These articles prompted considerable interest on the part of both U.S. and Canadian environmental enforcement officials and resulted in a reduction in the number of permitted border crossings for fuel tank trucks. On the Canadian side, a large-scale testing of fuel shipments for the presence of illegal hazardous waste was initiated at authorized crossings. Canadian officials set up portable laboratories and tested over 700 samples of fuel coming into Canada to ensure compliance with Canadian law. A limited amount of testing was also carried out by environmental enforcement officials on the U.S. side. Among other actions on the U.S. side, the U.S. Attorney for the Western District of New York assembled an informal fact-finding group consisting of 57 law enforcement and regulatory officials from the United States and Canada. These efforts failed to develop specific information that hazardous wastes were being illegally blended into fuel products and transported between Canada and the United States. Subsequent investigations by federal and state agencies also failed to determine how widespread the problem may be.

During our initial investigation, conducted between July and December 1989, we contacted over 30 federal and state officials--in Michigan, New York, Washington, and Vermont--responsible for enforcing environmental and hazardous waste laws applicable to the United States. Among those interviewed were officials of Customs, EPA, U.S. Attorneys' offices, the Michigan Department of Natural Resources, the New York State Department of Environmental Conservation, the Washington State Department of Ecology, and the Vermont Department of Conservation. We also reviewed testimony

given at a public hearing before a New York state commission on illegal disposal of hazardous waste through fuel blending. In addition, we examined pertinent Michigan Department of Natural Resources documents relating to two cases of alleged transport of hazardous waste illegally blended into fuel products. As discussed with Committee staff, we did not contact Canadian officials during the 1989 investigation because the U.S. Department of State was concerned that our inquiries might affect ongoing negotiations between the United States and Canada involving sensitive environmental issues.

SCOPE AND SERIOUSNESS OF ILLEGAL FUEL
BLENDING IS UNKNOWN

During our work, we identified seven investigations by American and Canadian authorities dealing with suspicions that hazardous wastes were being illegally blended into fuel products and transported over the road between the United States and Canada. While the findings of these efforts suggest that illegal fuel blending does occur, the scope of this problem remains unclear.

One high-level U.S. environmental enforcement official we interviewed commented on the difficulties inherent in identifying illegal fuel blending and defining the scope of the overall problem by comparing these tasks to the search for a needle in a haystack. Among the factors he and others cited to explain these difficulties were (1) insufficient, and inadequately trained, regulatory and enforcement personnel; (2) numerous border entry points and a large volume of fuel products shipped through these points each year; (3) the unreliability of much of the informant-supplied information received by law enforcement officials; and (4) the difficulty--short of costly chemical analysis--in detecting illegal hazardous contaminants in fuel products.

Currently, the U.S.-Canada border has 28 commercial crossing points where tank truck shipments of fuel products can pass between the two countries. In addition to over-the-road shipments, a large volume of fuel products moves across the border via rail, water, and pipeline. Environmental enforcement officials that we contacted are in general agreement that the personnel necessary to provide a strong regulatory and law enforcement presence exceed the resources currently available. Even if these resources were available, however, increased regulatory oversight and enforcement, involving spot checks as well as cargo sampling and testing, would pose logistical problems at crossing points where traffic delays and bottlenecks are already a concern.

Most of the information that law enforcement agencies have received concerning illegal fuel blending has been from informants. The environmental enforcement officials we

interviewed described this source of information as having inherent reliability problems. The source may be a disgruntled former employee or a competitor seeking to damage the reputation and business of the alleged violator, or the informant may be acting on erroneous or incomplete information.

According to environmental enforcement officials and other experts that we interviewed, no easy or inexpensive methods exist for detecting illegal adulteration of fuel products. Without analysis of the chemical composition of suspect products through such techniques as gas chromatography and mass spectrometry, it is difficult to determine whether the products contain illegal levels of hazardous contaminants. We were told that the tests required to analyze a single sample of fuel may range in cost from \$300 to \$1,000. Moreover, special training is required to draw and test samples; and protective suits and masks, as well as special breathing equipment, must often be worn.

REASONS FOR CONCERN ABOUT ILLEGAL FUEL BLENDING

The illegal blending of hazardous waste into fuel products is a matter of concern for a number of reasons. First and foremost are the dangers that uses of such adulterated fuels pose for the environment and for public health and safety. According to environmental enforcement officials and other experts in this area, the burning of fuel products illegally contaminated with hazardous waste materials could result in air pollution as well as the deposition of harmful chemical substances on the ground and in water sources. The burning of contaminated fuels can also cause damage to a user's physical plant. Furthermore, firms that now legally burn used fuels containing hazardous waste under RCRA might curtail their use of these fuels because of the uncertainty of fuel quality and safety. This would reduce the beneficial recycling of petroleum products that was intended under RCRA. A U.S. Attorney expressed the longer-term concern that unlawful and unsafe levels of contaminants in used fuels could persuade regulators to curtail or disallow any burning of these fuels.

INCENTIVES AND OPPORTUNITIES FOR ILLEGAL FUEL BLENDING

According to environmental enforcement officials, economic incentives exist for fuel blenders, shippers, and others to illegally blend hazardous wastes into fuel products. First, such mixing increases fuel volume, resulting in more product for sale and greater profit. Another incentive is to avoid the cost of proper disposal of hazardous wastes. Because U.S. statutory and regulatory requirements now make the management and disposal of such wastes more expensive, the temptation to dispose of these wastes illegally is increased--particularly when the perception exists that the probability of detection may be low.

Environmental enforcement officials also told us that the opportunities for illegally blending hazardous wastes into fuel products stem from deficiencies in current regulatory and enforcement programs. According to these officials, a shortage of enforcement resources exists, including personnel trained in hazardous waste enforcement and funds with which to purchase and operate the sophisticated equipment needed to take fuel samples and test them for chemical composition. As a result, the opportunity exists for illegally blended fuel to move undetected across the U.S.-Canada border. This is especially true because the effectiveness of the current system of certifications and manifests--set up under TSCA and RCRA--depends largely on the truthfulness of the manifests prepared by blenders, shippers, and other concerned parties.

ILLEGALLY BLENDED FUEL PRODUCT SHIPPED
BY LILYBLAD PETROLEUM INC.

On September 26, 1990, you also requested that we track one shipment of an alleged illegally blended fuel product from Lilyblad Petroleum Inc. of Tacoma, Washington, to an industrial user in Hannibal, Missouri. The prospective user rejected this shipment when chemical analysis revealed that it contained types and quantities of substances that the user was prohibited from burning and that would have damaged the user's physical plant.

Our investigation revealed that Lilyblad, a solvent recycling company, had a history of noncompliance with federal and state environmental requirements. The firm was investigated between September 1988 and June 1990 by the Washington State Department of Ecology, aided by EPA, for alleged violations of federal and state environmental regulations, as documented during 10 inspections. The Department of Ecology's investigation and findings resulted in a variety of enforcement actions in November 1990, including a \$903,000 fine against Lilyblad, the largest civil penalty issued to that date by the State of Washington in such a case.

Documents gathered during the Department of Ecology's investigation revealed that in June 1990 Lilyblad shipped 5,500 gallons of "waste flammable liquid--not otherwise specified" to Continental Cement Co., Hannibal, Missouri, for use as fuel in a cement kiln. Subsequent investigation revealed that at least a portion of the waste fuel in this shipment originated in Canada and had been supplied to Lilyblad by a Canadian firm, A. A. Anderson of Richmond, British Columbia. Lilyblad failed to test this waste to determine its composition, as required by federal and state regulations, and was fined for this violation by the Washington State Department of Ecology. Continental did, however, test the shipment it received from Lilyblad and rejected it because it contained, among other things, a high concentration of PCBs (polychlorinated biphenyl) not listed, as required, on

the manifest. In addition, Continental found DDT and chlordane, dangerous pesticides no longer used in the United States. The pesticides were also not listed, as required, on Lilyblad's manifest. Representatives of Continental told us that they routinely test waste fuel shipments to ensure that they do not contain substances that the firm is not permitted to burn or that could damage the firm's production processes and equipment.

After Continental's rejection of this shipment, Lilyblad representatives instructed the broker handling the shipping arrangements to redirect the shipment to Marine Shale Processors, operators of a waste disposal facility in Morgan City, Louisiana. However, upon receipt and testing of the shipment, Marine Shale also rejected it, because the firm lacked authority to dispose of certain of the hazardous wastes that it contained.

The shipment was next dispatched, again under instructions from Lilyblad officials, to GSX Recovery Systems, Inc. in Crowley, Louisiana. GSX indicated that it also was not authorized to dispose of such wastes but agreed to accept ownership of the waste shipment and make arrangements for transshipping it to Rollins Environmental Services in Baton Rouge, Louisiana, for final disposal.

Representatives of Rollins told us that the firm did dispose of the shipment, for a fee received from GSX and paid, ultimately, by Lilyblad. Rollins learned only after disposing of the shipment, however, that at least a portion of the wastes contained in it had originated outside the United States. Had they known this, company representatives said, they would not have taken possession and disposed of the shipment. According to company representatives, Louisiana law in effect at the time prohibited a waste treatment, storage, and disposal facility within the state from disposing of hazardous wastes generated outside the United States. According to a Rollins official, the firm was unaware of the foreign origin of the wastes. In fact, the manifest showed Lilyblad Petroleum Inc. as the generator of the wastes, with no reference to Lilyblad's original receipt of the wastes from a Canadian generator. RCRA regulations require hazardous waste importers, such as Lilyblad, to list both the importer's and the foreign generator's names on the manifest.

VIEWS OF ENVIRONMENTAL ENFORCEMENT OFFICIALS ON CURRENT REGULATORY ENFORCEMENT PROGRAMS AND DESIRABLE CHANGES

Customs officials told us that shipments of fuel products entering the United States from Canada are allowed to clear Customs on the basis of information provided by manifest. A typical manifest contains such information as the commodity shipped, origin and destination of the shipment, vehicle numbers and routing instructions, and the importer's certification that the product complies with TSCA. If the commodity being shipped

is a hazardous waste under RCRA, the manifest must identify the company that generated the waste; the EPA identification number of the waste generator; the transporter; and the facility where the waste will be treated, stored, or disposed.

One U.S. Attorney, testifying in a hearing on the subject of illegal fuel blending in August 1989, described the purpose of RCRA's manifest system as providing a reliable "cradle to grave" record of the generation, movement, and disposition of hazardous wastes. He added, however, that because of the system's heavy reliance on the integrity and honesty of waste generators; transporters; and treatment, storage, and disposal facility operators, it is widely referred to in law enforcement circles as a "dishonor system" rather than an honor system. He observed that if someone is intent on unlawful disposal of hazardous wastes, including waste-blended fuel products, the "fudging" of the manifest system is not very difficult. Such evasion may become apparent if the manifest paper trail is carefully followed. However, the problem then becomes one of having sufficient personnel to review the volume of paperwork created by the system.

A U.S. Customs Import Specialist told us that import specialists review copies of manifests primarily to verify collection of tariffs, not with the intent of identifying fuel shipment contaminants. Only when Customs officials have specific reason to question the information contained in the manifest and associated documentation would a shipment be sampled and tested. Also according to the Import Specialist, it takes approximately 2 weeks after the shipment has crossed the border for the paperwork to be reviewed. At this point, if Customs suspects that the commodity was improperly classified for tax purposes, it can request that the shipper send a sample of the shipment to the Customs laboratory for testing. Here again, however, according to Customs officials, the agency relies on the honesty and integrity of the shipper to provide a sample of the commodity actually shipped.

Environmental enforcement officials offered a variety of suggestions and proposals for improving the ability to detect and deter the shipment and disposal of illegally blended fuel products. Many of these entail significant additional resources to monitor and enforce compliance with current requirements. Other suggestions relate primarily to legislative changes, further study of the problem, and improved information sharing among interested parties in the regulatory and law enforcement community. Still other suggestions involve shifting responsibility for ensuring compliance away from government agencies to entities that use blended fuel products containing hazardous waste. These suggestions include the following:

- Increase roadside inspections of trucks transporting hazardous wastes, including blended petroleum products, with sampling and testing of cargo.
- Increase the number of federal and state regulatory and enforcement personnel to monitor and enforce compliance with TSCA's and RCRA's manifest systems and other requirements related to the generation, transport, treatment, storage, and disposal of hazardous wastes.
- Establish statewide, regional, or even national hotlines for the reporting of illegal blending, transport, and disposition of fuel products.
- Establish a joint state/U.S./Canadian commission to further examine and evaluate the fuel-blending problem on both sides of the border.
- Establish an intelligence unit within EPA's criminal enforcement program to correlate information sources and disseminate information within EPA and to other enforcement agencies.
- Make the deterrence levels under RCRA and TSCA consistent by designating the illegal disposal of PCBs under TSCA as a felony.
- Increase user accountability, by placing the burden of testing used fuel products--and ensuring their compliance with applicable laws and regulations--on the ultimate users of these products.

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This concludes our prepared statement.

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